

PATENT COOPERATION TREATY

Rec PCT/PTC 07 APR 2005

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

POULSEN, Henning K.
OTICON A/S
Strandvejen 58
DK-2900 Hellerup
DANEMARK

PCT

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT

(PCT Rule 71.1)

Date of mailing
(day/month/year)

07.09.04

Applicant's or agent's file reference
P-2002-020WO

IMPORTANT NOTIFICATION

International application No.
PCT/DK 03/00630

International filing date (day/month/year)
25.09.2003

Priority date (day/month/year)
08.10.2002

Applicant
OTICON A/S et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international
preliminary examining authority:



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized Officer

Pinna, A

Tel. +49 89 2399-7955



PATENT COOPERATION TREATY
PCT
INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P-2002-020WO	FOR FURTHER ACTION		See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/DK 03/00630	International filing date (day/month/year) 25.09.2003	Priority date (day/month/year) 08.10.2002	
International Patent Classification (IPC) or both national classification and IPC H05K1/02			
<p>Applicant OTICON AS et al.</p> <p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 1 sheets.</p> <p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> I <input checked="" type="checkbox"/> Basis of the opinion II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application 			

Date of submission of the demand 04.05.2004	Date of completion of this report 20.07.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Miot, F Telephone No. +49 89 2399-2714

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/DK 03/00630

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-4 as originally filed

Claims, Numbers

1-3 filed with telefax on 24.06.2004

Drawings, Sheets

1/1 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages:
- the claims, Nos.:
- the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/DK 03/00630

5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-3
	No: Claims	
Inventive step (IS)	Yes: Claims	1-3
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-3
	No: Claims	

2. Citations and explanations

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/DK 03/00630

With respect to Section V.

1. Claim 1 relates to a layered structure with electric leads for a hearing aid.

US-A-20010035529 (see claims 2-3 and fig. 1) US-A-6396000 (see claim 1 and fig. 1) discloses a layered structure with electric leads, wherein signals are fed along metallic leads, which are adhered to a layer on or within the layered structure and where a first and a second lead for connecting a first and a second lead for connecting a first and a second terminal of a component are provided and whereby the two leads are passed side by side and alternating on the two sides of the layer, and in such a manner that the first and second lead will cross one another at an angle but passing on each their side of the layer.

Thus, the subject-matter of claim 1 differs from the prior art known from US-A-20010035529 in that

the electric leads are specially adapted for a hearing aid, and the leads are connected to an amplifier at one end and to a hearing aid receiver at the other end.

Thus, the subject-matter of claim 1 has to be regarded as novel.

The problem underlying the subject-matter of claim 1 is that of avoiding interference problems in the field of hearing aids.

In modern hearing aids the signal driving the receiver is often a pulsed signal with only few different levels. Due to the nature of such a signal, the interference problem will be much bigger than expected. This has the effect that especially the telecoil, which is standard in many hearing aids, will pick up the noise radiated from the pulsed signal running in the lead to the receiver. In electrical devices the solution to this problem would be to place the telecoil at a place distanced from the wires connecting the receiver and the amplifier. Because of the lack of space this obvious solution cannot be used in hearing aids

The available documents are silent with respect to hearing aids and give therefore no incitement to the claimed solution.

US-A-6396000 (see claim 1 and fig. 1) is in particular concerned with a PCB and a method for reducing radio frequency interference emissions from conductive traces on a printed circuit board.

An inventive step has therefore to be admitted.

2. Claims 2-3. are dependent on claim 1. and as such also meet the requirements of the PCT with respect to novelty and inventive step.